REMARKS

Applicant wishes to thank the Examiner for considering the present application. In the Final Office Action dated March 2, 2006, claims 1-15 are pending in the application. Applicant respectfully requests the Examiner for a reconsideration of the rejections.

The Information Disclosure Statements filed December 29, 2005 and January 26, 2006, fail to comply with 37 CFR §1.97(c) because they fail to have the fee in 1.17(p) set forth therein.

> (c) An information disclosure statement shall be considered by the Office if filed after the period specified in paragraph (b) of this section, provided that the information disclosure statement is filed before the mailing date of any of a final action under § 1.113, a notice of allowance under § 1.311, or an action that otherwise closes prosecution in the application, and it is accompanied by one of:
>
> (1) The statement specified in paragraph (e) of this section; or
>
> (2) The fee set forth in § 1.17(p).

Applicant would like to point out that 37 CFR §1.97(c) which states that either a statement must be provided **OR** the fee set forth in 1.17(p). Because the statement was provided, Applicant respectfully requests the Examiner to reconsider the Information Disclosure Statements set forth herein.

Claims 1 and 13 stand rejected under 35 U.S.C. §112, second paragraph, as failing to comply with the enablement requirement. With regard to Claims 1 and 13, the Examiner states, "... the specification discloses inserting a digital video stream within a vertical blanking interval in paragraph 0047 and Figs. 4 and 5. However, in the broadcast television art, the vertical blanking interval does not have sufficient bandwidth to carry a video stream. The specification merely discloses using MPEG4 (or other suitable video

compression software) to compress the video stream to fit inside the relatively small bandwidth of the vertical blanking interval. It is not clear how this is done; the specification provides no additional details regarding what structure would actually be able to accomplish this. It is unclear how one with ordinary skill in the art would insert a digital video stream within the vertical blanking interval. As best understood from the specification, the Examiner will read 'digital video stream' as graphics or still video images." Applicant respectfully submits that inserting data in the vertical blanking interval is clearly set forth in the present invention. In the background of the *Kim* reference, a system is described that inserts information into the vertical blanking interval. The background of the *Kim* reference also recognizes the problem that there is limited space. Applicant has recognized this limited space and set forth a way to accommodate a digital video stream into the vertical blanking interval. Figure 5 specifically recites frame grabber software 126. The frame grabber software is the opposite of the VBI bridge hardware 114. The VBI bridge hardware 114, as stated in paragraph 0047, provides vertical blanking interval software which is used to superimpose the compressed digital signal onto the vertical blanking interval of the broadcast television signal. Since it is known where the vertical blanking interval of the broadcast television signal is, the frame grabber software is used to remove the digital signal therefrom. The digital signal may be reformed using various filtering techniques since the over-the-air broadcast signal is analog and the superimposed signal is digital. Thus, filtering techniques may be used. Paragraph 0048 specifically describes the mobile device 122 that includes the frame grabber software. Of course, Figs. 6, 7 and 9 also illustrate the frame grabber and decompression software. The type of superimposition and the type of frame grabbing software depend on the technique used for providing the digital signal thereon. As mentioned above, various techniques for compressing the digital signal may be used such as MPEG4 or other suitable video compression schemes. Applicant believes it is clear that the digital signal is superimposed on the analog signal. Imposing a digital signal on an analog signal is well known in the power line carrier art.

The *Kim* reference, both in its background and in its text, made clear that this technique was known in the broadcast arts, but what was not known in the broadcast arts was to compress the digital signals so that a digital video stream may be provided in the vertical blanking interval. This will be argued further below.

Applicant believes it is clear that digital data may be provided within a vertical blanking interval. The Examiner should recognize that by changing the frequency of the digital signal, more information may be placed therein. The present application may be used with various types of video signals. Video signals for small portable devices may have a lower resolution or may be highly compressed. Therefore, a lot of information may not necessarily be transmitted. For every frame there is a vertical blanking interval. Therefore, a considerable amount of space is available to insert a digital video stream. A digital video stream is removed from the analog signal using the frame grabber and reassembled into the digital video stream. With the frequencies available, it is believed that enough bandwidth may be provided to include a digital video stream. In the sentence bridging pages 2 and 3, the Examiner states that the vertical blanking interval does not have sufficient bandwidth to carry a video stream. Applicant merely states this is speculation by the Examiner. As mentioned above, the amount of bandwidth available depends upon the frequencies used by the devices. It is contemplated that the use of digital compression and a high bandwidth will allow a digital video stream to be placed therein. Applicant respectfully requests the Examiner to reconsider this rejection.

Claims 7 and 15 stand rejected under 35 U.S.C. §102(e) as being unpatentable over *Shintani* (6,661,472). Claim 7 recites a portable user appliance for receiving a digital video stream embedded in excess bandwidth of an over-the-air digital broadcast television signal. The television tuner receives the over-the-air digital broadcast signal and an excess bandwidth frame grabber receives the digital stream therein. A digital decompressor decompresses the digital video stream into a decompressed video stream and a display displays the decompressed video stream. The *Shintani* reference specifically mentions various numbers of channels whether they are primary or virtual

channels. However, the *Shintani* reference never mentions excess capacity. The Examiner refers the Applicant to Col. 1, lines 18-29. Applicant agrees that virtual channels are described. However, Applicant can find no teaching or suggestion for the virtual channels being provided in the excess bandwidth of an over-the-air digital broadcast television signal. Applicant therefore respectfully requests the Examiner to reconsider this rejection.

Claim 15 has similar limitations with respect to the excess bandwidth of a digital broadcast signal. Applicant therefore respectfully submits that claim 15 is allowable for the same reasons set forth above with respect to claim 7.

Claims 1 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Kim* (6,556,248) in view of *Freeman* (2002/0129374). Applicant respectfully traverses.

Claim 1 is directed to a portable user appliance that receives a digital video stream embedded in a vertical blanking interval of a broadcast signal. Claim 1 includes a television tuner, a vertical blanking interval frame grabber for receiving the digital video stream, a digital decompressor for decompressing the video stream into a decompressed video stream, and a display displaying the decompressed video stream. Although the *Kim* reference specifically recites using the vertical blanking interval, no vertical blanking interval frame grabber is taught or suggested. Also, the *Kim* reference does not teach or suggest decompression software. Applicant has reviewed the entire specification and can find no teaching for compressing or decompressing a digital signal.

The Examiner admits that the *Kim* reference does not disclose a digital decompressor for decompressing the digital video stream into a decompressed video stream. The Examiner cites the *Freeman* reference for this teaching. The Examiner points to Figs. 2 and 3, compressors 3 and decompressor/decoder 110, paragraphs 50 and 53-54. Admittedly, the *Freeman* reference describes compression. Applicant admits that compression of video signals exists as is evidenced by the disclosure of the MPEG4 compression scheme described.

What is not shown in the combination of references is using compression for digital signals in a vertical blanking interval. The Examiner is forming a hindsight reconstruction to try to form the invention. Nothing in the *Freeman* reference suggests providing content in a vertical blanking interval and nothing in the *Kim* reference teaches compression. This is evident in the *Kim* reference even though the *Kim* reference in the background of the invention recognizes the limited field to which information may be attached. Therefore, Applicant respectfully requests the Examiner to reconsider the rejection of Claims 1 and 13.

Claims 2, 3, and 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Kim* in view of *Cho* (5,760,848). Although the *Cho* reference illustrates a video monitor that is portable and has a cradle, no teaching or suggestion is provided in the *Cho* reference for the elements missing from the *Kim* and *Freeman* references.

Likewise, claim 3 recites a cradle. Applicant respectfully submits that although *Cho* shows a cradle, no teaching or suggestion is provided for the missing elements from the *Kim* and *Freeman* references.

Claim 14 recites utilizing an automobile antenna to receive the over-the-air broadcast signals. The Examiner states that *Cho* reference illustrates an automobile antenna. However, although the antenna of the device is within the automobile, no automobile antenna is illustrated. That is, the antenna illustrated in *Cho* is merely the device antenna and not an automobile antenna. Applicant therefore respectfully requests the Examiner to reconsider this rejection as well.

Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Kim* in view of *Freeman* in view of *Cho* in further view of *Rudolph* (5,949,498). Although the *Rudolph* reference illustrates a diversity antenna system, no teaching or suggestion is provided in *Rudolph* for providing a digital decompressor that receives a signal from a vertical blanking interval of a broadcast television signal. Applicant therefore respectfully requests the Examiner to reconsider this rejection as well.

Claim 5 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Kim*

in view of *Freeman* as applied to Claims 1 and 13 above, in view of *Leermakers* (2003/0105845).

The *Leermakers* reference also does not teach or suggest the elements missing from the *Kim* and *Freeman* references. Applicant therefore respectfully requests the Examiner to reconsider this rejection as well.

Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Kim* in view of *Freeman* in further view of *Yang* (6,529,742).

Claim 6 depends from claim 1 and recites that the tuner and frame grabber are coupled within a cellular telephone. Applicant respectfully submits that the *Yang* reference also does not teach or suggest a digital decompressor for decompressing a digital video stream that arrived through a vertical blanking interval of a broadcast television signal. Applicant therefore respectfully requests the Examiner to reconsider this rejection as well.

Claims 8 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Shintani* (6,661,472) in view of *Cho* (5,760,848).

Claims 8 and 9 depend from Claim 7. Claims 8 and 9 are similar to Claims 2 and 3 above. The *Cho* reference also does not teach or suggest excess bandwidth. Applicant therefore respectfully requests the Board to reconsider the rejection of Claims 8 and 9.

Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Shintani* in view of *Cho* as applied to Claims 8 and 9, and in further view of *Rudolph* (5,949,498).

Claim 10 is similar to Claim 4. The *Rudolph* reference does not teach or suggest utilizing the excess bandwidth of a digital over-the-air broadcast television system. Applicant therefore respectfully requests the Examiner to reconsider the rejection of Claim 10 as well.

Claim 11 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Shintani* in view of *Cho* and in further view of *Rudolph* as applied to Claim 10, and in further view of *Leermakers*

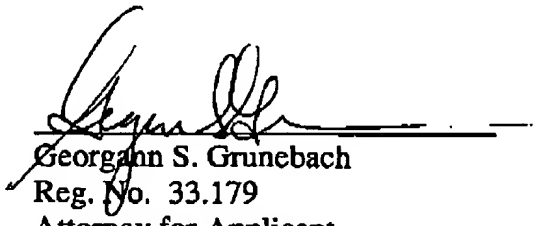
The *Leermakers* reference also does not teach or suggest the use of excess bandwidth of a signal. Applicant therefore respectfully requests the Examiner to reconsider the rejection of Claim 11.

Claims 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Shintani* in view of *Yang*.

Applicant respectfully submits that the *Yang* reference also does not teach using the excess bandwidth for transmitting a digital broadcast television signal. Applicant respectfully requests the Examiner to reconsider this rejection as well.

In light of the above remarks, Applicant submits that all rejections are now overcome. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments which would place the application in better condition for allowance, he is respectfully requested to call the undersigned attorney.

Respectfully submitted,



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